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The Health Equity Promotion Model: Reconceptualization of Lesbian, Gay, Bisexual, and Transgender (LGBT) Health Disparities

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National health initiatives emphasize the importance of eliminating health disparities among historically disadvantaged populations. Yet, few studies have examined the range of health outcomes among lesbian, gay, bisexual, and transgender (LGBT) people. To stimulate more inclusive research in the area, we present the Health Equity Promotion Model—a framework oriented toward LGBT people reaching their full mental and physical health potential that considers both positive and adverse health-related circumstances. The model highlights (a) heterogeneity and intersectionality within LGBT communities; (b) the influence of structural and environmental context; and (c) both health-promoting and adverse pathways that encompass behavioral, social, psychological, and biological processes. It also expands upon earlier conceptualizations of sexual minority health by integrating a life course development perspective within the health-promotion model. By explicating the important role of agency and resilience as well as the deleterious effect of social structures on health outcomes, it supports policy and social justice to advance health and well-being in these communities. Important directions for future research as well as implications for health-promotion interventions and policies are offered.

Individuals from marginalized populations in the United States are at elevated risk of poor health, disability, and premature death (National Institutes of Health [NIH], 2010). Such health disparities are defined as adverse health outcomes for communities that have, as a result of "social, economic and environmental disadvantage, systematically experienced greater obstacles to health" (U.S. Department of Health and Human Services, 2010). Although a primary objective of the NIH is to eliminate health disparities among marginalized groups (NIH, 2010), it was only in *Healthy People 2020* that lesbian, gay, bisexual, and transgender (LGBT) people were for the first time identified in U.S. health priorities as an at-risk population (U.S. Department of Health and Human Services, 2012). The Institute of Medicine (2011) has determined LGBT populations are health disparate and underserved, recognizing the lack of attention to sexual and gender identity as critical gaps in efforts to reduce overall health disparities (Centers for Disease Control and Prevention, 2011).

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While health disparities research mainly documents group differences in health outcomes, a more propelling goal is to promote health equity, defined by Whitehead and Dahlgren (2007) as the opportunity to attain full health potential. Krieger et al. (2010) describe a health equity perspective as "the instrumental use of human rights concepts and methods for revealing and influencing government-mediated processes linking social determinants to health outcomes, especially in relation to the principles of participation, nondiscrimination, transparency, and accountability" (p. 748).

LGBT Health Disparities

According to population-based surveys, about 3.5% of U.S. adults self-identify as lesbian, gay, and bisexual (LGB) and 0.3% as transgender (Gates, 2011), which correspond to approximately 9 million people. These numbers increase dramatically when same-sex sexual attraction and behavior are also considered. Clearly, there is a sizable subgroup of Americans whose health merits increased research attention.

Sexual and gender identity are complex constructs and are highly contingent upon culture and social context, which can shift rapidly over time. Sexuality encompasses at least three key components: sexual identity, sexual attraction, and sexual behavior. Sexual identity is an individual's own perception of his or her overall sexual self. For many people their sexual identity, such as lesbian, gay, bisexual, or heterosexual, is consistent with their sexual attraction and behaviors, but for some individuals sexual identity may be inconsistent with attraction and/or behavior. For example, a man whose primary sexual partner is a woman may identify as heterosexual yet occasionally have sex with men. Sexual identity may be more fluid than previously assumed, especially among women (Kinnish, Strassberg, & Turner, 2005).

Gender refers to the behavioral, cultural, or psychological traits that a society associates with male and female sex. Transgender generally refers to people whose gender identity is at odds with the gender they were assigned at birth according to their sex and physiological characteristics of their bodies. For example, a transgender woman is a person who was born physiologically male but whose deepest sense of self is as female. It is important not to conflate sexual and gender identity because they are separate constructs (e.g., transgender individuals may have a heterosexual, bisexual, lesbian, or gay sexual identity).

With the inclusion of questions on sexual identity in an increasing number of national population-based health surveys, a growing body of research is documenting health disparities among LGB people. Specifically, LGB people are at higher risk for poor mental health (Diamant & Wold, 2003; Dilley, Simmons, Boysun, Pizacani, & Stark, 2010), psychological distress (Chae & Ayala, 2010; Cochran, Mays, & Sullivan, 2003; Conron, Mimiaga, & Landers, 2010; Riggle, Rostosky, & Horne, 2010; Wallace, Cochran, Durazo, & Ford, 2011), suicidal ideation (Conron et al., 2010), and mental health disorders (e.g., depression and anxiety) compared with heterosexuals (Cochran, 2001).

More recent research is investigating the physical health of LGBT people. Relative to heterosexuals, LGB populations have higher rates of disability (Fredriksen-Goldsen, Kim, & Barkan, 2012; Fredriksen-Goldsen, Kim, Barkan, Muraco, & Hoy-Ellis, 2013; Wallace et al., 2011), more physical limitations (Conron et al., 2010; Dilley et al., 2010), and poorer general health (Conron et al., 2010; Wallace et al., 2011). Elevated rates of HIV are also observed among gay and bisexual men (Centers for Disease Control and Prevention, 2013) and transgender women (Herbst et al., 2008; Schulden et al., 2008). Among lesbian and bisexual women, there are higher rates of overweight and obesity (Boehmer, Bowen, & Bauer, 2007; Case et al., 2004; Dilley et al., 2010). Although findings are mixed, some studies have indicated LGB adults may be at elevated risk of some cancers (Case et al., 2004; Dibble, Roberts, & Nussey, 2004; Valanis et al., 2000) and cardiovascular disease (Case et al., 2004; Fredriksen-Goldsen, Kim et al., 2013; Hatzenbuehler, McLaughlin, & Slopen, 2013). Large population-based studies have found that LGB adults are more likely to report diagnoses of asthma than their heterosexual counterparts (Conron, Mimiaga, & Landers, 2010; Dilley et al., 2010).

With few exceptions, limited research has focused specifically on the health status of transgender individuals. Two recent studies with large national samples of transgender individuals found that rates of depression, anxiety, and overall psychological distress were disproportionately higher for this population than for non-transgender women and men (Bockting, Miner, Swinburne Romine, Hamilton, & Coleman, 2013; Fredriksen-Goldsen, Cook-Daniels, et al., 2014). Research findings also document disproportionate rates of military service (Fredriksen-Goldsen et al., 2011; Grant et al., 2011), incarceration (Grant et al., 2011; Jenness, Maxson, & Sumner, 2007), sexual violence (Jenness et al., 2007), and poor general health (Fredriksen-Goldsen et al., 2011) among transgender people.

LGBT Historical Context

Historically, homosexuality in the United States has been largely invisible, because it was often equated with deviancy, sickness, and shame. Same-sex sexual behavior was against the law, with sodomy a criminal offense in all 50 states prior to 1961 (Kane, 2003). Until its removal from the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) in 1973 (Silverstein, 2009), homosexuality was treated as a "sociopathic personality disorder." Both prejudice and stigma likely result in higher rates of mental health problems among LGBT people (Garnets, Herek, & Levy, 2003; Herek, 1998), which is reflective of the historical practice of pathologizing and criminalizing LGBT people.

Despite the larger social stigma, underground communities accessible to sexual minorities began to develop in major metropolitan areas during and after World War II (Canaday, 2009). In 1969 after a routine police raid on an LGBT night club in New York City, the Stonewall Riots erupted as an act of resistance, sparking the modern U.S. gay rights movement. Despite the progress, a growing backlash from conservative and religious elements in society combined with AIDS-related losses in the early 80s and into the mid-90s, shifted the dominant discourse of homosexuality to a *sin* punishable by death (i.e., AIDS; Hammack & Cohler, 2011). Yet, this too was actively resisted by LGBT activists and grassroots political organizations shifting from resistance to a growing urgency for "emancipation" (Weststrate & McLean, 2010).

More recently, the marriage equality debate has shifted dramatically since the federal prohibition of same-sex marriage through the Defense of Marriage Act. LGBT people can now legally marry in more than 30 states and Washington, DC, and lawsuits regarding

marriage equality are pending in all other states, as well as the Commonwealth of Puerto Rico (Freedom to Marry, 2014; Human Rights Campaign, 2014b).Yet, still today, discrimination in employment, housing, and public accommodations is not prohibited on the basis of sexual orientation or gender identity by federal law (Human Rights Campaign, 2014a). In 2013, while the DSM-5 reclassified "gender identity disorder" as "gender dysphoria," which is no longer pathological per se, the classification continues to stigmatize transgender people via a "mental disorder" classification that is dependent on "clinically significant distress or impairment" (American Psychiatric Association & DSM-5 Task Force, 2013).

Risk Factors for LGBT Health Disparities

While biological and genetic influences on health in the general population receive ample attention (Human Genome Project Information Archive, 2013), much less is known about the effects of structural and environmental contexts on health and the roles of social determinants, which may vary considerably across marginalized groups. Indeed, the World Health Organization has affirmed that "the root causes of health inequities are to be found in the social, economic, and political mechanisms" (Solar & Irwin, 2007, p. 67). Yet, only a handful of studies have examined the effect of discrimination and social stigma on physical as well as mental health outcomes in LGBT populations (Balsam, Molina, Beadnell, Simoni, & Walters, 2011; Bockting et al., 2013; Chae & Walters, 2009; Feinstein, Goldfried, & Davila, 2012; Fredriksen-Goldsen, Emlet, et al., 2013; Lehavot & Simoni, 2011).

In conceptualizing the determinants of LGBT health disparities, researchers have relied almost exclusively on stress and coping models. The Stress Process Model (Pearlin, Lieberman, Menaghan, & Mullan, 1981) first addressed the influence of stressful life events associated with structural inequalities on mental health. According to the model, disadvantaged status, traumatic early events, and unexpected life transitions in one's social role, behaviors, and social relationships cause both long-term stressors and proliferated stressors, which, in turn, impact health and well-being.

Most notably, the Minority Stress Model (Meyer, 2003) postulates that sexual minorities experience increased mental health problems because of stress processes unique to their status, namely discrimination, expectations of rejection, concealment, and internalized homophobia. Hatzenbuehler (2009) expanded upon this model with the Psychological Mediation Framework, which suggests that emotion dysregulation, interpersonal problems, and cognitive processes mediate the link between heightened stressors because of sexual minority status and psychopathology.

While these theories advance our understanding of LGBT mental health disparities, current conceptualizations fail to explain why many LGBT people enjoy good health despite adversity and to articulate the multilevel factors that may influence the continuum of LGBT health over the life course.

Reconceptualization of LGBT Disparities: *The Health Equity Promotion Model*

We propose a new conceptual framework that situates LGBT health across the life course and focuses on how minority status related to sexual and gender identity can result in variations in health for LGBT populations over time. Examining the resilience as well as risks that influence LGBT people is a first step toward a comprehensive understanding of their health across the life course. Resilience factors that may delink the relationship between stressors in early life and consequential health deterioration in later life have not been adequately addressed in previous frameworks.

Based on a conception of health equity, a primary premise of this framework is that all individuals have a right to good health, and it is a collective responsibility to ensure all obtain their full health potential. Highlighting the importance of intersecting social positions within a life course perspective, the framework acknowledges both inter- and intragroup variability, and that an individual's development of health potential can vary within a group of individuals who share a similar life course (Spiro, 2007).

The framework points to structural and environmental factors as determinants of health as well as community and individual-level factors, highlighting resources, resilience, human agency, and risks. A life course perspective provides a means for taking into consideration both historical and social contexts that are shared by age cohorts and the unique needs, adaptation, and resilience of LGBT individuals as human agency. This perspective highlights differences in experience between an LGBT person who came of age when homosexuality was considered a psychiatric disorder compared with an LGBT adult now in early adulthood during the marriage equality debates. Equally important, a life course perspective identifies an individual life trajectory as important in understanding current health outcomes (Mayer, 2009).

The Health Equity Promotion Model considers the ways in which both the exclusion and resistance of LGBT people has played out over time given the shifting historical and social context. According to Elder (1998, p. 4), "Individuals construct their own life course through the choices and actions they take within the opportunities and constraints of history and social circumstances." For example, despite historical and social marginalization, LGBT individuals have developed their own ways of building communities (e.g., strong social ties and mutual support) and behavioral and psychological coping skills (e.g., shifting identity management techniques based on differing historical and social circumstances).

The Health Equity Promotion Model, building upon the Minority Stress Theory and the Psychological Mediation Framework, integrates a life course development perspective within a health equity framework to highlight how (a) *social positions* (socioeconomic status, age, race/ethnicity) and (b) *individual and structural and environmental context* (social exclusion, discrimination, and victimization) intersect with (c) *health-promoting and adverse pathways* (behavioral, social, psychological, and biological processes) to influence the continuum of health outcomes in LGBT communities (Figure 1). While not intended as a theory or exhaustive classification of the determinants of LGBT health, the framework provides a guide to consider the multiple levels and intersecting influences on the full continuum of LGBT health, especially as they relate to equity and resilience in LGBT communities. It aims to stimulate research that addresses the full component of factors influencing the range of LGBT health outcomes.

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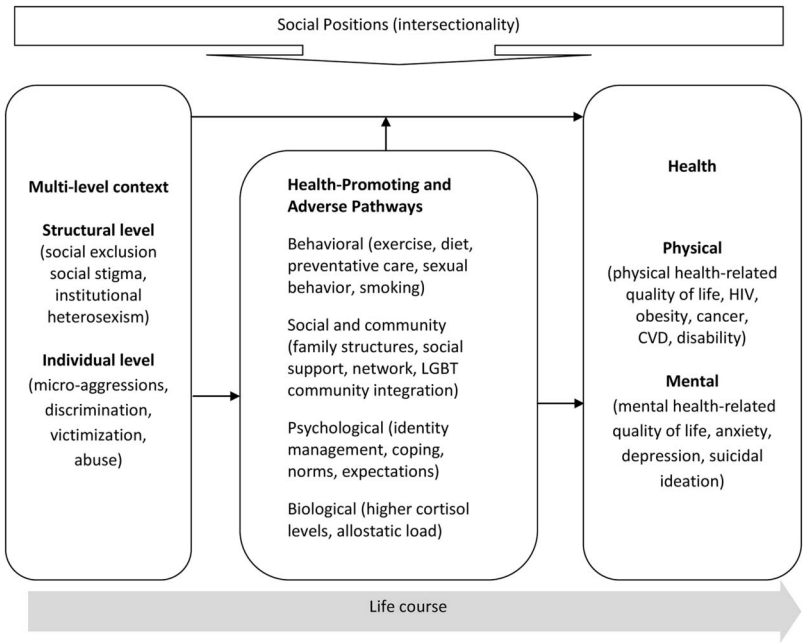

Figure 1. Health Equity Promotion model.

Social Positions

As health occurs within a social context (Marmot & Wilkinson, 2006), it is not surprising that marginalized social statuses are linked to disparities in health outcomes (Braveman, Cubbin, Egerter, Williams, & Pamuk, 2010; Mulia, Ye, Zemore, & Greenfield, 2008; Williams & Mohammed, 2009). A consideration of social positions and health must include attention to the complex nature of intersecting social positions including diverse sexual and gender identities and how social locations interact and the potential for synergistic disadvantage or advantage based on multiple statuses (Hankivsky & Christoffersen, 2008). Yet, most health research has ignored heterogeneity within LGBT communities (Institute of Medicine, 2011), without exploring how LGBT health is differentiated by social position (e.g., sexual identity, gender identity, sex, race/ethnicity, age, population cohort, socioeconomic status, nationality/nativity, immigration status, geographic location, and disability status). As Figure 1 demonstrates, combinations of these social positions may be associated with types of marginalization—as well as potential for strength, resilience and opportunities.

We do know that there are sex differences in LGBT health behaviors (Conron et al., 2010; Dilley et al., 2010), social networks (Fredriksen-Goldsen, Emlet, et al., 2013; Grossman, D'Augelli, & Hershberger, 2000), and health outcomes (Conron et al., 2010; Dilley et al., 2010; Fredriksen-Goldsen, Kim et al., 2013; Thomeer, 2013; Wallace et al., 2011). Gender expression appears to be another important factor to consider, as one's level of femininity or masculinity has been found to be associated with different types of stressors (Feinstein et al., 2012; Lehavot & Simoni, 2011). Both transgender and bisexual people experience systemic disparities and emerge as critically underserved and at-risk populations, who also display important strengths (Bockting et al., 2013; Fredriksen-Goldsen et al., 2011). For example, evidence has documented pronounced socioeconomic risks and health disparities among transgender people (Kenagy, 2005; National Gay and Lesbian Task Force, 2013; Xavier, Honnold, & Bradford, 2007), yet they also have larger social networks as compared with LGB people (Fredriksen-Goldsen, Emlet, et al., 2013). Such sexual minority social positions can be sources of strength for LGBT people, such as providing a "family of choice," community support, and pride in one's identity and community (Fredriksen-Goldsen, Kim, Shiu, Goldsen, & Emlet, 2014).

Less is known about the health of LGBT persons of color. As described in the Health Equity Promotion Model, race and ethnicity and culture intersect with sexual and gender identities. For example, studies find differential response rates to sexual orientation questions by race and ethnicity (Kim & Fredriksen-Goldsen, 2013). Although the term LGBT is most often used, research has found that Asian Americans often identify their sexual orientation as "queer" (Dang & Vianney, 2007), and African Americans often use the term "same-gender loving" (Battle, Cohen, Warren, Fergerson, & Audam, 2002), both of which are most often treated as missing in research studies. Furthermore, some commonly used sexuality terms related to sexual identity are not translatable in Spanish (Zea, Reisen, & Díaz, 2003).

A potent example of the intersection of culture, race, and sexual and gender identities is the experience of two-spirits. According to Walters and colleagues: "The term *two-spirit* is used currently to reconnect with Native American and tribal traditions related to sexual and gender identity; to transcend the Eurocentric binary categorizations of homosexual versus heterosexual or male versus female; to signal the fluidity and

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nonlinearity of identity processes; and, to counteract heterosexism in Native communities and racism in LGBT communities" (Walters, Evans-Campbell, Simoni, Ronquillo, & Bhuyan, 2006, p. 127, italics in original).

Multilevel Context: Individual Manifestations, Such As Microaggressions, Discrimination, and Victimization; and, Structural and Environmental, Such As Societal and Institutional Levels of Oppression and Social Exclusion

Microaggressions and interpersonal assaults and overt acts of discrimination may have a significant impact on LGBT individuals' health. Characterized as enacted stigma, such acts have been defined as "the overt behavioral expression of sexual stigma through actions such as the use of antigay epithets, shunning and ostracism of sexual minority individuals, and overt discrimination and violence" (Herek, 2007, p. 908). The Minority Stress Model (Meyer, 2003) specifically addresses the negative influence of such social stressors on mental health among LGBT individuals. In addition, recent studies also found that discrimination is associated with physical health outcomes among gay and bisexual men (Huebner & Davis, 2007). Discrimination and victimization has been found to be associated with disability, depression, and poor general health (Fredriksen-Goldsen, Emlet, et al., 2013). LGBT people who have been physically assaulted report more loneliness, poorer mental health, and more lifetime suicide attempts (D'Augelli & Grossman, 2001). Among transgender older adults, lifetime victimization explains heightened risks of poor health outcomes (Fredriksen-Goldsen, Cook-Daniels, et al., 2014).

Injustice in health is also exercised at the societal and institutional level. Hatzenbuehler and his colleagues (2013) argue that although societal conditions and social norms can systematically and institutionally disadvantage marginalized individuals and lead to poorer health outcomes, little research has examined to what extent such social exclusion influences physical health. Structural and contextual factors create a context of marginalization and oppression, including laws and policies that unfairly treat sexual and gender minorities as well as cultural and institutional oppressions, widespread societal stigma, and religious intolerance and persecution. For example, population-based data indicate that most Americans have access to health care, yet evidence suggests that LGBT adults may have less access to health care when needed (Addis, Davies, Greene, Macbride-Stewart, & Shepherd, 2009; Conron et al., 2010; Dilley et al., 2010; Krehely, 2009). In one of the largest surveys of transgender individuals, participants indicated high levels of postponing medical care when sick or injured, as well as significant barriers to accessing health care (Grant, Mottet, & Tanis, 2010). In addition, differences in geographical contexts may impact health for LGBT populations. For example, a study found that nonurban dwelling lesbians are less likely than urban-dwelling lesbians to disclose their sexual identity to health care providers (Austin, 2013).

Social inclusion also positively impacts the health of LGBT adults. Population-based longitudinal data offer support that legally recognized marriage, for example, bestows benefits for health and longevity for both men and women in the general population (Rendall, Weden, Favreault, & Waldron, 2011). The American Medical Association (2009) acknowledges that lack of access to the benefits of full marriage equality contributes to health disparities among LGB adults. Living in states that specifically ban same-sex marriage is linked to increases in mood disorders (Hatzenbuehler, McLaughlin, Keyes, & Hasin, 2010; Rostosky, Riggle, Horne, & Miller, 2009). Research suggests that same-sex couples in legally recognized relationships experience less psychological distress and lower levels of internalized heterosexism (Riggle et al., 2010) and better health (Williams & Fredriksen-Goldsen, 2014) than their counterparts in committed but not legally recognized relationships.

Health-Promoting and Adverse Pathways, Including Behavioral, Social, Psychological, and Biological Mechanisms

As Figure 1 indicates, these four mechanisms mediate the effects of individual and structural and environmental context on health outcomes; equally importantly, the four mechanisms can moderate these relationships, which account for how health trajectories may differ among LGBT individuals who share similar life experiences. In other words, despite the stressful experiences of discrimination and social exclusion, some LGBT individuals maintain health potential by utilizing health-promoting resources that they have cultivated through life. As discussed below, the proposed model suggests that the four pathways offer both health-promoting and adverse mechanisms.

As behavioral pathways, both *health-promoting and adverse health behaviors* (e.g., sexual behavior, smoking, diet, exercise, preventive care) are observable human acts, by an individual or group of individuals, to change or maintain health. Adverse health behaviors that are linked to poor health as well as the action of individuals in the promotion of good health and prevention of illness are important components of the proposed model. LGBT adults report disproportionately higher levels of some adverse health behaviors including higher rates of smoking (Conron et al., 2010; Dilley et al., 2010; Grant et al., 2010; Ryan, Wortley, Easton, Pederson, & Greenwood, 2001), excessive drinking (Cochran, Keenan, Schober, & Mays, 2000; Conron et al., 2010; Dilley et al., 2010), and in some cases drug use (Conron et al., 2010), which are leading causes of preventative deaths. Studies found that experiences of discrimination are associated with elevated use of substances among LGBT individuals (McCabe, Bostwick, Hughes, West, & Boyd, 2010; McLaughlin, Hatzenbuehler, & Keyes, 2010). In terms of health screenings, lesbian and bisexual women may be at risk of not utilizing preventive health care (e.g., routine check-ups) and screenings (e.g., mammograms and Pap tests) although findings are mixed (Conron et al., 2010; Dilley et al., 2010). Studies found that lesbians with higher levels of perceived health care discrimination are more likely to delay utilizing cervical cancer screening (Tracy, Lydecker, & Ireland, 2010). Moreover, transgender individuals report high levels of postponing medical care, often because of fears of discrimination or inability to afford care (Grant et al., 2010).

How behavioral pathways operate, and their interaction with social and historical marginalization as well as community norms and expectations among LGBT populations, remains unanswered. Obesity is one example. The rates of obesity in the United States have steadily increased in recent decades (Freedman & the Centers

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for Disease Control and Prevention, 2011), and studies suggest that chronic discrimination may be associated with elevated risk of obesity (Hunte & Williams, 2009). Yet, despite experiencing greater discrimination, gay men are less likely than heterosexual men to be overweight or obese (Conron et al., 2010; Dilley et al., 2010), and they are more likely to diet, be fearful of becoming fat, and feel more dissatisfied with their bodies (Kaminski, Chapman, Haynes, & Own, 2005). Lesbians, on the other hand, are more likely than heterosexual women to be obese (Aaron et al., 2001; Conron et al., 2010). In a study matching lesbian and heterosexual sisters, lesbians had greater waist circumferences, waist-to-hip ratios, higher body-mass indices, and more extensive weight-cycling (Roberts, Dibble, Nussey, & Casey, 2003). Nonetheless, they are more likely to exercise on a weekly basis. Indeed, in a study that examined health behaviors over the adult life course by sexual identity, lesbians under the age of 50 had increased odds of moderate activity, and bisexual women had increased odds of muscle strengthening relative to their heterosexual counterparts (Boehmer, Miao, Linkletter, & Clark, 2012). Diet and exercise as well as weight management are critical determinants of morbidity and mortality and thus should be examined in LGBT populations to understand the complex ways in which these behaviors and community norms interact to impact health in both positive and negative ways.

Social processes, which include the effects of interrelationships with others on health, have been widely documented (Barker, Herdt, & de Vries, 2006; Hatzenbuehler, Nolen-Hoeksema, & Dovidio, 2009). As Hatzenbuehler and colleagues (Hatzenbuehler, 2009; Hatzenbuehler, Phelan, et al., 2013) proposed, discrimination and social exclusion lead to social isolation among LGBT individuals; but for those who have developed strong social resources through their life course, the negative impact of adverse experiences on health may be alleviated (Fredriksen-Goldsen, Emlet, et al., 2013). Antonucci (2001) argues that social relations and networks are shaped through one's life course and differentiated by personal and social factors. In the general population, social network size and type influence health outcomes (Kawachi & Berkman, 2001), yet social networks differ between LGBT people and the general population. LGBT people often develop "families of choice," extended networks of partners and friends (Gabrielson, 2011), with less reliance on legal or biological family members.

There is compelling evidence that social factors may increase social capital and that living in states that have higher concentrations of same-sex couples may be a protective factor for health (Hatzenbuehler, Keyes, & McLaughlin, 2011). A large community-based sample of New York City LGB adults found that community connectedness and integration is significantly related to well-being, with bisexuals and young adults evidencing the lowest levels of integration into these communities (Kertzner, Meyer, Frost, & Stirratt, 2009). Interestingly, a recent study suggests that social network size among LGBT adults may not be related to positive physical health outcomes; more likely it is the quality and not the quantity of social contacts that is more important (Fredriksen-Goldsen, Cook-Daniels, et al., 2014).

In terms of *psychological and cognitive processes*, Hatzenbuehler's Psychological Mediation Framework (Hatzenbuehler, 2009) identifies general and minority-specific psychological processes that mediate the link between stressors and psychological health. General psychological processes include positive processes such as problem solving and active coping, as well as negative processes such as rumination and avoidant coping. Minority-specific psychological processes, identified by Meyer (2003), include internalized homophobia, expectations of rejection, and identity concealment. The negative impact of minority stressors such as discrimination and victimization on psychological processes has to be further investigated; a certain extent of exposure to stressors related to disadvantaged social positions over the life course may help to develop stress-coping capacity (Hash & Rogers, 2013). Because most LGBT people are not readily identifiable to others as such, they manage the disclosure of their sexual and gender identity. Disclosure, which is in part dependent upon the degree to which a stigmatized identity has been integrated, increases opportunities to strengthen social relations and allows for association and interaction with other LGBT people (Meyer, 2003). Whereas disclosure can expose an LGBT person to hostility from others (Herek, 2008), maintaining a positive sexual identity has been associated with positive health outcomes (Fredriksen-Goldsen et al., 2014).

Whereas *biological influences* on health in the general population are documented, they have seldom been investigated in LGBT research. Yet, some biological processes may be particularly relevant in LGBT populations given the larger social context and history of marginalization. For example, the biological stress process (e.g., evidence of higher cortisol levels) is applicable to the proposed framework. Physiological responses to chronic stressors are important predictors of health. For example, allostatic load (AL), a physiological stress-related mechanism linking the psychosocial environment to physiological dysregulations (McEwen, 1998), is associated with cardiovascular disease, cancer, infection, cognitive decline, accelerated aging, and mortality (Juster, McEwen, & Lupien, 2010; Seeman, Singer, Rowe, Horwitz, & McEwen, 1997; Wolkowitz, Reus, & Mellon, 2011). It is important to note that AL may be influenced by the other mechanisms in the proposed model. For example, positive behaviors, such as exercise, as well as adverse behaviors, such as smoking and excessive drinking, both influence, although in different directions, the physiological responses to chronic stressors. Still, such biological influences on both positive and negative health among LGBT individuals have not been adequately investigated, although a growing number of studies are assessing physiological responses to stressors among sexual minorities, especially among those living with HIV disease (Antoni et al., 1991; Greeson et al., 2008; Hengge, Reimann, Schäfer, & Goos, 2003; Leserman et al., 2000).

Implications for Future LGBT Health Research, Policy, and Practice

The specific framework used for understanding health outcomes influences the type and targets of interventions proposed. Grounded in the Health Equity Promotion Model, we make several recommendations for the field.

Research Implications

Previous LGBT health disparity studies have mainly utilized deficit-focused models to understand poor health outcomes, while existing research shows manifestations of resilience and good

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health among LGBT people (Fredriksen-Goldsen, Emlet, et al., 2013). Investigating sexual and gender identity-specific strengths and resources are equally important in the effort to understand LGBT health. It is essential that efforts consider the health-promoting mechanisms, such as human agency and resistance of LGBT people, as we explore the opportunity to attain full health potential. As Krieger and colleagues (2010) asserted, to advance health, both human rights and the important roles of participation, nondiscrimination, transparency, and accountability must be considered.

Research simultaneously needs to explore the myriad ways in which multiple forms of social exclusion and marginalization interact with behavioral, social and community, psychological, and biological factors at multiple levels to identify factors that foster or impede health equity. To this end, it is required that information regarding sexual and gender identity, behavior, and attraction be collected as is data on other sociodemographic characteristics that are known to influence health, including age, race, ethnicity, gender, income, education, and many others. Both bisexual and transgender people are found to be vulnerable to poor health and their distinct needs must be considered. Further research needs to also examine their adaptation and resilience in the face of social exclusion.

Furthermore, research studies must incorporate LGBT individuals of varying social positions to examine the influence of the intersectionality of social positions on health. For example, the experiences of LGBT people of color and those of varying socioeconomic statuses are largely absent in existing research. Exploring potential effects of cumulative risks and resources over the life course across multiple social positions that can be simultaneously occupied by LGBT individuals will allow for a better understanding of the full range of health outcomes and resources and risks for the development of culturally responsive interventions.

Multilevel methods that allow for analysis of structural/environmental contexts are necessary to fully understand LGBT health disparities. Current intervention efforts are often solely focused on the individual, such as *d-up: Defend Yourself!* for Black men who have sex with men (MSM) to promote condom use for HIV/STI (sexually transmitted infections) prevention (McCree, Jones, & O'Leary, 2010); smoking cessation for lesbian and bisexual women (Doolan & Froelicher, 2006); and support groups for LGBT youth to protect against suicide (Remafedi, 1994). In addition to these, targeting larger systems including policy or other environmental and structural change initiatives (Graves, Like, Kelly, & Hohensee, 2007) may better promote health equity and lead to improved health outcomes.

To this end, longitudinal studies, currently sparse in LGBT research, are necessary. Understanding individual trajectories and cohort variations in health within shifting structural and environmental contexts would help to articulate ways to promote health equity. In addition, it is important to recognize the potential tension between heterogeneous approaches given the diverse nature of these communities and the need for system-level changes, which often assume more homogenous needs. For example, promoting calorie reduction may be helpful for weight control among sexual minority women but may be potentially harmful for sexual minority men if body image issues outweigh obesity concerns. Researchers must work to translate such findings into practice and use results to advocate for policy change.

Policy Implications

Several policy changes are needed to promote health equity, including nondiscrimination laws in employment, housing and public accommodations, marriage equality, and legislation to support non-kin caregivers. Sexual and gender identity need to be added as protected classes in an expansion of the 1964 Civil Rights Act. In 2012, the Equal Opportunity Employment Commission ruled that gender identity is protected under Title VII of the 1964 Civil Rights Act (Townsend, 2012). Although federal agencies are increasingly ruling that sexual and gender identity fall under the prohibitions against discrimination based on sex and sex-stereotyping (see, for instance, Bradford & Mayer, 2014), the lack of uniform application makes enforcement challenging. Policies and politics play a significant role in promoting good health (Solar & Irwin, 2007).

Another important policy debate impacting the lives of people in same-sex relationships is recognition of same-sex unions, though not all LGBT individuals would choose or desire to be married. Most recently, the number of states in the United States that have legalized same-sex marriage continues to grow at a rapid rate. Legal marriage can provide access to significant economic benefits; for example, through Social Security, those married and who reside in states with legal same-sex marriage have access to spousal and survivors' benefits, that until recently were not available to same-sex couples.

It is important to recognize that many of the current policy advocacy efforts are primarily addressing the needs of LGBT people in committed relationships. Yet, such policies do not adequately address the needs of LGBT people who are single, in nontraditional relationships, or partnered with no desire to become married. Thus, it is critical that families of choice and next-of-kin that are not partners or biological or legal family members are also considered in policy advocacy efforts. For example, extending paid leave laws to friends and other informal caregivers in alternative family structures is needed. Given that legal marriage may also result in divorce, it will be equally important to examine how these legal changes shift the nature of helping relationships and social resources in these communities, such as support provided by ex-partners and family of choice.

Practice Implications

Utilizing an equity perspective, focusing on resilience and human agency by capitalizing on the benefits of LGBT communities, can allow for social movement, akin to how the LGBT community united against HIV (Hubbard, 2012; Shilts, 1987). For example, it is imperative to increase attention to health behaviors, both positive and adverse, and their role in health outcomes. Intervention research is needed that increases proactive preventive behaviors such as targeted screenings to reduce risk for MSM of color in terms of HIV/STIs (Magnus et al., 2010) and high rates of smoking in LGBT youth (Ryan et al., 2001) and adults (Conron et al., 2010; Dilley et al., 2010; Grant et al., 2010; Ryan et al., 2001). Also, utilizing community norms and behaviors, such as interventions for diet and weight control based on popular opinion leaders (Kelly, 2004) to endorse behavior change, may be an innovative way to take advantage of social capital.

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Life course perspectives, highlighting rapidly changing social norms related to both sexual and gender identity, raise important generational issues for future study. For example, will the lexicon used today, including the term "LGBT," remain stable or even useful given increasingly supportive views among the general population and the embracing by younger generations of diverse sexual and gender identities? To shift practice to promote health equity, practitioners will need to assess their own overt and covert biases regarding LGBT people, and understand how these, as well as the lives of LGBT people, have been and continue to be shaped by contested, shifting sociocultural and historical discourses (Fredriksen-Goldsen, Hoy-Ellis, Goldsen, Emlet, & Hooyman, 2014). In addition, practitioners must use their practice knowledge and commitment to social justice to advocate for policy change and equitable access to services.

Policymakers also need to understand the ways in which policies have and continue to shape the larger social context and access to resources within society. Empirically based information is needed to help shape the discourse relative to policy development and implementation so that policymakers can make the most informed, socially just decisions regarding the distribution of resources and their role in promoting health equity.

Finally, adopting a health equity framework has global and human rights implications. A health equity perspective endorses social justice by highlighting the role of societal structures and human rights in health. Increasingly, international human rights agreements include rights to health care and endorse accountability for the health and health policies of nations (Reutter & Kushner, 2010). Achievement of health equity requires empowering LGBT people and their allies to take action and address the environmental and structural resources and risks that influence their health.

Keywords: health equity; health disparities; mental and physical health; sexual orientation; sexual identity; gender identity; lesbain; gay; bisexual; transgender; minority health

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